

[Name of Document] ABSTRACT

[Abstract]

[Problems]

It is an object of the present invention to provide a data rewritable
5 type optical recording medium that has improved high-linear-velocity
data recording characteristics and is simultaneously improved in data
reproduction durability and storage reliability.

[Solution]

An optical recording medium includes a recording layer 14, a
10 dielectric layer 15 disposed on the side of a light incidence plane 17a with
respect to the recording layer 14, a dielectric layer 13 disposed on the
side opposite from the light incidence plane 17a with respect to the
recording layer 14, a heat radiation layer 16 disposed on the side of the
light incidence plane 17a with respect to the dielectric layer 15 and a
15 reflective layer 12 disposed on the side opposite from the light incidence
plane 17a with respect to the dielectric layer 13. The recording layer 14
contains a phase change material represented by an atomic composition
formula: $Sb_aTe_bGe_cMn_d$ as a primary component, where the value of a is
equal to or larger than 57 and equal to or smaller than 74, the value of c
20 is equal to or larger than 2 and equal to or smaller than 10, the value of d
is equal to or larger than 5 and equal to or smaller than 20, the value of
 $(a + d)$ is equal to or larger than 74 and equal to or smaller than 81 and
the value of a/b is equal to or larger than 2.9 and equal to or smaller than
4.7. The optical recording medium according to the present invention has
25 good recording characteristics even in the case where data are to be
recorded at an extremely high linear recording velocity such as 14 m/sec.

[Selected Figure]

Figure 1